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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,616	07/31/2003	Symon Whitehorn	200208745-1	4759

22879 7590 04/05/2007  
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FORT COLLINS, CO 80527-2400

EXAMINER
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PRABHAKHER, PRITHAM DAVID

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/632,616

Applicant(s)

WHITEHORN ET AL.

Examiner

Pritham Prabhakher

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 07/31/2003
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1,3,5,7-8,10-11,14,15 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishino et al. (US Patent No.: 7046287B2).**

*In regard to **Claim 1**, Nishino et al. disclose a handheld device, comprising:*

*a top portion (1x in **Figure 2B**);*

*a bottom portion (1y in **Figure 2B**);*

*a hinge, rotational about a first axis and having a first end and a second end, coupling the top portion to the bottom portion (A hinge 1z (Figure 2A) connects the top portion 1y to the bottom portion 1x. The hinge has two ends. The first end is the end with the lens 2 and the rest of the hinge and the second end is the display 4, **Figures 2A-2C**); and*

*an image capture device (lens 2), coupled to the first end of the hinge and oriented to capture images aligned along the first axis of the hinge (The lens is coupled to the first end of the hinge and can be aligned to capture images along the first axis of the hinge, **Figure 2B**).*

*Regarding **Claim 3**, Nishino et al. teach of the device of claim 1, wherein:  
wherein the handheld device is a cell phone (Portable telephone, **Column 1, Lines 7-9**).*

*In regard to **Claim 5**, Nishino et al. teach of the device of claim 1, wherein the image capture device includes:*

*an optically adjustable lens (The focal point of the optical lens system 2 is adjusted, **Column 5, Lines 59-61**).*

*With regard to **Claim 7**, Nishino et al. teach of the device of claim 1, further comprising:*

*a detachable lens coupled to the image capture device along the first axis (The lens 2 can be swiveled and moved around (detachable) the first axis 1z as evidence by Figures 2a-2c).*

*In regard to **Claim 8**, Nishino et al. teach of the device of claim 1, further comprising:*

*a shutter control (3) coupled to the image capture device (The shutter control 3 is coupled to the image capture device, **Figures 2a-2c and Figure 4**).*

*Regarding **Claim 10**, Nishino et al. disclose the device of claim 1, further comprising:*

*a small screen interface (viewfinder 4), coupled to the second end and aligned along the first axis of the hinge, for displaying images captured by the image capture device (The viewfinder 4 is aligned along the first axis of the hinge and attached to the*

second end (1y). It displays images captured by the image capture device, **Figure 2b and Column 5, Lines 36-40).**

With regard to **Claim 11**, Nishino et al. disclose the device of claim 1, wherein the top portion (1x) includes:

a large screen interface (1b) for displaying images captured by the image capture device and other handheld device information (1b is used to display images captures and other handheld information (function switch), **Figures 2b and Column 7, Lines 6-20).**

Regarding **Claim 14**, Nishino et al. disclose a method for operating a handheld device, comprising:

permitting a first large screen interface to rotate about a first hinge axis with respect to a second large screen interface (1x can rotate about the hinge axis 1z with respect to 1y, **Figure 2b);**

capturing images aligned along the first hinge axis (The lens 2 is used to capture images along the first hinge 1z, **Figure 2B);** and

setting a mode in which the device operates in response to an orientation of the first large screen interface to a second large screen interface (The device in Figures 2a-2c set the displays (1b, 1c and 4) for display depending on how the displays 1a and 1b are oriented with each other, **Figures 2a-2c and Column 6, Lines 6 et seq.).**

In regard to **Claim 15**, Nishino et al. teach of the method of claim 14 wherein the setting element includes:

*displaying information on a small screen interface aligned along the first hinge axis, if the first large screen interface is folded onto the second large screen interface, and the top and bottom large screen interfaces are facing each other (If the top and bottom screen interfaces (1b and 1c) are facing each other, the small screen interface (4) can still be used to display information, **Figure 2a**).*

*Regarding **Claim 20**, Nishino et al. disclose a handheld device, comprising a:  
means for permitting a first large screen interface to rotate about a first hinge axis with respect to a second large screen interface (1a can rotate about 1z with respect to 1c, **Figure 2b**);*

*means for capturing images aligned along the first hinge axis (Lens 2 can capture images aligned around the axis 1z, **Figures 2a-2c**); and*

*means for setting a mode in which the device operates in response to an orientation of the first large screen interface to a second large screen interface (The device operates in response to the position of the first screen interface (1b) to the second screen interface (1c). Looking at Figure 2a, if (1a) and (1c) are facing each other, they are inoperable and only viewfinder 4 can be used. If however, they are open as in Figure 2b, an image can be displayed on interface 1b, **Figures 2a-2c**).*

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 2,4,12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishino et al. (US Patent No.: 7046287B2) as applied to claims 1,11 and 14 above.**

*In regard to **Claim 2**, Nishino et al. do not specifically disclose that the handheld device from claim 1 is a personal digital assistant. However, official notice is taken saying that it would have been obvious to one of ordinary skill in the art at the time of the invention to integrate a personal digital assistant with the handheld device taught by Nishino et al. because the parts to the handheld device are commonly integrated in with the parts of a personal digital assistant. The PDA functions would augment the existing functions of the telephone, thus expanding the use of the device.*

*Regarding **Claim 4**, Nishino et al. do not specifically disclose that the handheld device is a laptop computer. However, official notice is taken saying that it would have been obvious to one of ordinary skill in the art at the time of the invention to integrate a laptop computer with the handheld device taught by Nishino et al. because the parts to the handheld device are commonly integrated in with the parts of a laptop computer.*

Regarding **Claim 12**, Nishino et al. teach of the device of claim 11 wherein the bottom portion (1y) includes a second large screen interface (1c). Nishino et al. also teach of accepting input for controlling the image capture device on an interface (keyboard display), **Figure 2b and Column 7, Lines 3-5**. However, Nishino et al. do not teach that the keyboard display is displayed on the second large screen interface (1c). However, it would have been obvious to one of ordinary skill in the art at the time of the invention to move the keyboard function switch display from the top large screen interface to the bottom large screen interface because this would have freed up more room on the first large screen interface and the displayed image would not have had to share room with the keyboard display.

In regard to **Claim 19**, Nishino et al. teach of the method of claim 14 wherein the setting element includes:

displaying information on a large screen interface, if the first large screen interface is folded onto the second large screen interface and the first and second large screen interfaces are facing away from each other (Figure 11c shows that the screens 1b and 1c can be folded so that they face away from each other. The hinge 1z in this case is made up of pivot shafts 1f and 1g. The image displayed in 1c in this case is a horizontally inverted (upside- down) image of the one displayed on 1b, **Figure 11c and Column 12, Lines 45-50 of Nishino et al.**). Although Figure 11a-c do not have the viewfinder 4 from Figures 2a-c, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate it into the hand-held device from Figures



*11a-11c because in doing power can be conserved by turning the display 1b off and using viewfinder 4 instead to display an image, **Column 6, Lines 55-62**. 1c can still however function by displaying an inverted image of the one displayed on 1b.*

**Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishino et al. (US Patent No.: 7046287B2) as applied to claim 1 above, and further in view of Kotchick et al. (US Pub No.: 20030017856A1)**

*With regard to **Claim 6**, Nishino et al. teach of the image capture device (lens 2) along the first axis (Figure 2A-2C). However, Nishino et al. do not teach of a lens filter being coupled to the image capture device. Kotchick et al. teaches of filters being added in with lenses. It would have been obvious to incorporate filters into the image capture device of Nishino et al. because this improves optical performance and functionality, **Paragraph 0039 of Kotchick et al.***

**Claims 9,13, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishino et al. (US Patent No.: 7046287B2) as applied to claims 1 and 14 above, and further in view of Shibata et al. (US Patent No.: 7084919B2).**

*Regarding **Claim 9**, Nishino et al. teach of a top portion (1x) and a bottom portion (1y) and a first axis 1z. However, Nishino et al. do not explicitly teach of the device of*

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*claim 1, further comprising: a sub-hinge coupling the top portion to the bottom portion, and rotational about a second axis which is perpendicular to the first axis. Shibata et al. teach of a portable handheld device that has a top portion (20) coupled by means of a sub-hinge (32) to a bottom portion (10). The second axis on which the sub-hinge 32 rests on is perpendicular to a first axis (31), **Figure 3 of Shibata et al.** It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a sub-hinge to enable the top portion and the bottom portion of Nishino et al. be rotational about a second axis parallel to the first axis of Nishino et al. because this enables the portable device to adapt to a suitable direction for carrying out the respective functions of the device flexibly, **Column 3, Lines 4-8 of Shibata et al.***

*In regard to **Claim 13**, Nishino et al. teach of a personal digital assistant, comprising:*

*a top portion (1x in **Figure 2B**);*

*a bottom portion (1y in **Figure 2B**);*

*a hinge, rotational about a first axis and having a first end and a second end,*

*coupling the top portion to the bottom portion (A hinge 1z (Figure 2A) connects the top portion 1y to the bottom portion 1x. The hinge has two ends. The first end is the end with the lens 2 and the rest of the hinge and the second end is the display 4, **Figures 2A-2C**);*

*an image capture device (lens 2), coupled to the first end of the hinge and oriented to capture images aligned along the first axis of the hinge (The lens is coupled*

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to the first end of the hinge and can be aligned to capture images along the first axis of the hinge, **Figure 2B**);

a small screen interface (viewfinder 4), coupled to the second end and aligned along the first axis of the hinge, for displaying images captured by the image capture device (The viewfinder 4 is aligned along the first axis of the hinge and attached to the second end (1y). It displays images captured by the image capture device, **Figure 2b and Column 5, Lines 36-40**);

a first large screen interface (1b) for displaying images captured by the image capture device (1b is used to display images captures **Figures 2b and Column 7, Lines 6-20**); and

a second large screen interface (1c in Figure 2b).

However, Nishino et al. do not teach of displaying other digital assistant information in addition to the captured image on the first display screen. Official notice is taken saying that it would have been obvious and well known to one of ordinary skill in the art to display other information aside from the captured image on the display screen of a device that can capture images to inform the user of details about the image or the image capturing conditions.

Nishino et al. also do not teach that the second large screen interface accepts an input for controlling the digital assistant. Although Nishino et al. also teach of accepting input for controlling the image capture device on an interface (keyboard display), (**Figure 2b and Column 7, Lines 3-5**), the reference does not teach that the keyboard

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*display is displayed on the second large screen interface (1c). However, it would have been obvious to one of ordinary skill in the art at the time of the invention to move the keyboard function switch display from the top large screen interface to the bottom large screen interface because this would have freed up more room on the first large screen interface and the displayed image would not have had to share room with the keyboard display.*

*Also, Nishino et al. do not explicitly teach of the device of claim 1, further comprising: a sub-hinge coupling the top portion to the bottom portion, and rotational about a second axis which is perpendicular to the first axis. Shibata et al. teach of a portable handheld device that has a top portion (20) coupled by means of a sub-hinge (32) to a bottom portion (10). The second axis on which the sub-hinge 32 rests on is perpendicular to a first axis (31), **Figure 3 of Shibata et al.** It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a sub-hinge to enable the top portion and the bottom portion of Nishino et al. be rotational about a second axis parallel to the first axis of Nishino et al. because this enables the portable device to adapt to a suitable direction for carrying out the respective functions of the device flexibly, **Column 3, Lines 4-8 of Shibata et al.***

*Regarding **Claim 16**, Nishino et al. teach of the method of claim 14 wherein the setting element includes:*

*displaying information on the first large screen interface in a first portrait orientation, if the first large screen interface is not folded onto the second large screen interface (If the first large screen interface 1b is not folded onto 1c as shown in Figure*

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2b of Nishino et al., an image captured is still displayed on 1b, **Column 7, Lines 10-11 of Nishino et al.**), Nishino et al. also teach that there is less than a  $\pm 45$  degrees of rotation (**See Figure 2b of Nishino et al.**). However, Nishino et al. do not teach that the  $\pm 45$  degrees of rotation are about a second hinge axis, which is perpendicular to the first hinge axis. Shibata et al. teach of a portable handheld device that has a top portion (20) coupled by means of a sub-hinge (32) to a bottom portion (10). The second axis on which the sub-hinge 32 rests on is perpendicular to a first axis (31), **Figure 3 of Shibata et al.** It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a sub-hinge to enable the top portion and the bottom portion of Nishino et al. be rotational about a second axis parallel to the first axis of Nishino et al. because this enables the portable device to adapt to a suitable direction for carrying out the respective functions of the device flexibly, **Column 3, Lines 4-8 of Shibata et al.**

In regard to **Claim 17**, Nishino et al. teach of the method of claim 14 wherein the setting element includes:

displaying information on the first large screen interface in a landscape orientation, if the first large screen interface is not folded onto the second large screen interface, and there is more than  $\pm 45$  degrees of rotation about a second hinge axis, which is perpendicular to the first hinge axis (**Display 21 of Figure 3 in Shibata et al.**).

With regard to **Claim 18**, Nishino et al. teach of the method of claim 16 wherein the setting element includes:

displaying information on the first large screen interface in a second portrait orientation, if the first large screen interface is folded onto the second large screen

*interface, and the first and second large screen interfaces are facing away from each other, wherein the second portrait orientation is upside-down with respect to the first portrait orientation (Figure 11c shows that the screens 1b and 1c can be folded so that they face away from each other. The hinge 1z in this case is made up of pivot shafts 1f and 1g. The image displayed in 1c in this case is a horizontally inverted (upside-down) image of the one displayed on 1b, **Figure 11c and Column 12, Lines 45-50 of Nishino et al.**).*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pritham Prabhakher whose telephone number is 571-270-1128. The examiner can normally be reached on M-F (7:30-5:00) Alt Friday's Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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*Pritham . D. Prabhakher*

A handwritten signature in black ink, appearing to read "David Ometz", with a long horizontal line extending to the right.

DAVID OMETZ  
SUPERVISORY PATENT EXAMINER